

### AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application.

#### Listing of Claims:

1-7 (Cancelled)

8. (Currently Amended) A measuring device for measuring body fluids, comprising an implantable access structure for accessing the interior of the body, said access structure having an end coupled to the measuring device, and a sensor to which the body fluid to be measured is supplied via said access structure, said sensor being arranged on said measuring device outside the body, in the immediate vicinity of the end of said access structure.

9. (Original) The measuring device as set forth in claim 8, wherein said sensor is arranged such that it may be removed and replaced.

10. (Original) The measuring device as set forth in claim 8, wherein said access structure provides a fluid channel for providing a fluid flow, said device further comprising a valve means arranged in the fluid channel for preventing a reverse flow of fluid from said sensor into said access structure.

11. (Original) The measuring device as set forth in claim 8, further comprising an infusion set comprising a catheter head, wherein said sensor is arranged on the catheter head.

12. (Currently Amended) A ~~The~~ measuring device for measuring body fluids as set forth in claim 8, the measuring device further comprising an implanted dialysis probe for accessing the interior of the body, said dialysis probe having an outlet outside the body, the outlet having an end coupled to the measuring device and a sensor to which the body fluid to be measured is supplied via said dialysis probe, wherein said sensor being is arranged in the outlet of the dialysis probe.

13. (Original) An infusion set comprising a measuring device as set forth in claim 8.
14. (Original) A dialysis probe comprising a measuring device as set forth in claim 8.
15. (Currently Amended) A dialysis probe, the dialysis probe being implantable and comprising a probe head and access structure coupled to the probe head and comprising a supply tube and a discharge tube, at least a portion of the discharge tube lying outside a patient's body when in use and carrying a sensor.
16. (Currently Amended) The dialysis probe according to claim 15, said probe head further comprising an inlet and an outlet, said inlet being coupled to the supply tube, said outlet being coupled to the discharge tube.
17. (Currently Amended) The dialysis probe according to claim 16, the sensor being adjacent to the coupling of the discharge tube and the outlet.
18. (Original) The dialysis probe according to claim 17, wherein the sensor is immediately adjacent to the patient's body when the probe is in use.
19. (Original) The dialysis probe according to claim 18, further comprising a reflux valve associated with the outlet.
20. (Original) The dialysis probe according to claim 18, further comprising a valve associated with the outlet for selectively controlling the flow of dialysis fluid.
21. (New) The measuring device as set forth in claim 12, wherein said dialysis probe provides a fluid channel for providing fluid flow, said device further comprising a valve means arranged in the fluid channel for preventing a reverse flow of fluid from said sensor into said dialysis probe.
22. (New) The measuring device as set forth in claim 12, wherein said sensor is arranged such that it may be removed and replaced.

23. (New) The measuring device as set forth in claim 12, wherein the dialysis probe further comprises a probe head, the probe head lying outside of the body.
24. (New) A measuring device for measuring body fluids, the measuring device comprising:  
an implanted dialysis probe for accessing the interior of the body, the implanted dialysis probe including a supply tube and a discharge tube;  
an inlet for the dialysis probe feeding into the supply tube, the inlet being situated outside of a patient's body;  
an outlet for the dialysis probe feeding from the discharge tube, the outlet being situated outside of the patient's body, the outlet having an end coupled to the measuring device and a sensor to which the body fluid to be measured is supplied via said dialysis probe, said sensor being located outside of the patient's body in the immediate vicinity of an end of the discharge tube.
25. (New) The measuring device as set forth in claim 24, wherein the sensor is arranged such that it may be removed and replaced.
26. (New) The measuring device as set forth in claim 24, further including a reflux valve, the reflux valve being configured to prevent fluid flow back into the discharge tube.
27. (New) The measuring device as set forth in claim 24, further including a seal for sealing the outlet of the discharge tube.
28. (New) The measuring device as set forth in claim 24, further including a supporting plate, the supporting plate supporting the dialysis probe via support of the supply tube and the discharge tube, the inlet and the outlet being positioned above the supporting plate.
29. (New) The measuring device as set forth in claim 28, further including a reflux valve, the reflux valve being configured to prevent fluid flow back into the discharge tube, the reflux valve being positioned above the supporting plate.